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  *                W E L C O M E   T O   T H E                    *
  *          U. S.   P A T E N T   T E X T   F I L E              *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

=> s 436/518,523-531/cclst

          1694 436/518/CCLST
          1994 436/523+NEXT8/CCLST  (9 TERMS)
L1        2903 436/518,523-531/CCLST
                 ((436/518 OR 436/523+NEXT8)/CCLST)

=> s monolayer# (p)(self(w)assembled)

          9977 MONOLAYER#
        254731 SELF
        276690 ASSEMBLED
L2          72 MONOLAYER# (P)(SELF(W)ASSEMBLED)

=> s l1 and l2

L3           8 L1 AND L2

=> s l2 and peptide#

         28562 PEPTIDE#
L4          11 L2 AND PEPTIDE#

=> s l3 and l4

L5           5 L3 AND L4

=> d l5 1-5 cit,ab


1.  5,763,191, Jun. 9, 1998, Universal binding film; Wolfgang Knoll, et
al., 435/7.1; 422/68.1, 82.05; 427/327, 328, 402; 428/615, 621, 624;
435/4, 75; 436/518, 524, 525, 527 [IMAGE AVAILABLE]

US PAT NO:     5,763,191 [IMAGE AVAILABLE]            L5: 1 of 5

ABSTRACT:
The invention concerns a binding matrix containing a carrier material and
a solid phase reactant which is adsorbed to this via anchor groups that
is capable of binding to at least one free reaction partner wherein the
solid phase reactant forms a dilute and essentially laterally homogeneous
binding layer on the surface of the carrier material. In addition a
method for the determination of an analyte in a sample solution is
claimed in which a solid phase reactant is used which is a component of a
binding matrix according to the present invention. In this process the
specific binding reaction is preferably determined by optical reflection
techniques.

2.  5,677,195, Oct. 14, 1997, Combinatorial strategies for polymer
synthesis; James L. Winkler, et al., 436/518; 422/134, 149; 435/6,
7.92, 970, 973; 436/89, 527, 528; 530/333, 334, 335; 536/25.3,
25.31, 25.32; 935/88 [IMAGE AVAILABLE]
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US PAT NO: 5,677,195 [IMAGE AVAILABLE] L5: 2 of 5

ABSTRACT:
A method and device for forming large arrays of polymers on a substrate (401). According to a preferred aspect of the invention, the substrate is contacted by a channel block (407) having channels (409) therein. Selected reagents are delivered through the channels, the substrate is rotated by a rotating stage (403), and the process is repeated to form arrays of polymers on the substrate. The method may be combined with light-directed methodolgies.

3. 5,622,872, Apr. 22, 1997, Analyte detection through observed optical modulation of polymerized lipid layers; Hans O. Ribi, **436/518**; 204/403; 422/82.08, 82.09; 435/7.1, 7.5, 288.7; 436/532 [IMAGE AVAILABLE]

US PAT NO: 5,622,872 [IMAGE AVAILABLE] L5: 3 of 5

ABSTRACT:
Bioelectronic sensors are provided employing a thin surfactant polymeric electrically conducting layer to which may be bound members of specific binding pairs. Binding of an analyte or a reagent to the specific binding pair member layer may change the electrical, optical, or structural properties of the layer for measurement of analyte. The change in the polymeric layer provides for a sensitive measurement.

4. 5,491,097, Feb. 13, 1996, Analyte detection with multilayered bioelectronic conductivity sensors; Hans O. Ribi, et al., **436/518**; 422/82.01, 82.02, 82.03, 82.06; 435/7.1, 7.5, 7.92; 436/501, **527**, **531**, 806 [IMAGE AVAILABLE]

US PAT NO: 5,491,097 [IMAGE AVAILABLE] L5: 4 of 5

ABSTRACT:
Methods are provided for the detection of an analyte in a sample using a bioelectronic sensor comprising a thin surfactant polymeric electrically conducting layer to which members of specific binding pairs are bound. Specific binding of analyte or analyte competitor to the bound specific binding pair member results in a change in the conductivity of the polymer. The resultant change in conductivity is related to the presence of analyte in the sample.

5. 5,443,955, Aug. 22, 1995, Receptor membranes and ionophore gating; Bruce A. Cornell, et al., 435/7.21, 317.1; 436/501, 512, **518** [IMAGE AVAILABLE]

US PAT NO: 5,443,955 [IMAGE AVAILABLE] L5: 5 of 5

ABSTRACT:

The present invention provides a membrane the conductivity of which is dependent on the presence or absence of an analyte. The membrane comprises a closely packed array of self-assembling amphiphilic molecules and two ionophore components. A receptor molecule reactive with the analyte is provided on one of the ionophore components. The binding of the analyte to the receptor molecule causes a change in the relationship between the ionophore components such that the flow of ion across the membrane is prevented or allowed. The ionophore components are preferably selected from the group consisting of amphotericin B, gramicidin A monomers and combinations thereof, with gramicidin A monomers being particularly preferred. The present invention also provides a membrane including receptors directed against the Fc region of antibodies. These receptors are preferably derived from polyclonal antibodies. These membranes provide a "generic" surface which will bind antibodies in a manner such that the antigen binding regions of the antibody are not hindered. The present invention further provides a device adapted for

implantation in a mammalian body, the device being characterized in that it is coated with a membrane comprising a closely packed array of self-assembling amphiphilic molecules and receptor molecules, the receptor molecules being such that the attachment of specific cells to the membrane is enhanced or avoided. It is particularly preferred that the receptor molecules are directed against fibronectin, vitronectin, endothelial cells, or epithelial cells. It is further preferred that the membrane coating the device also includes a plurality of ion channels such as gramicidin.